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ABSTRACT

The first part of this study explored the form of verbal exchanges in the classroom, the effects of various conditions upon the exchanges between child and adult, and the child's competence in producing questions and narratives. Research was carried out in two first-grade classrooms located in a predominately Hawaiian working-class suburb of Honolulu. Children were found to be more likely to volunteer narratives in recorded conversations with a familiar adult when they were not answering questions. Since individually directed questions were generally interpreted as negative attention, the typical forms of classroom communication apparently are not the most productive ones. The second part of the study, using the same subjects, evaluated whether the use of nonstandard speech by first-grade children interfered with their learning to read. Evidence implied that improvement in reading sentences written by the child correlated with an index of the use of standard speech and that the use of nonstandard verbs correlated negatively with the correct identification of pictures used in "reading readiness" tests. (Author/LH)

LANGUAGE USE IN THE CLASSROOM

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University of Hawaii
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Final Report on
Language Use in the Classroom:
Part I: The Meaning of Questions and Narratives to Hawaiian Children
Part II: The Effects of Nonstandard Speech in Learning to Read

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PART I

THE MEANING OF QUESTIONS AND NARRATIVES OT HAWAIIAN CHILDREN

Abstract

This study explores the form of verbal exchanges in the classroom, the effects of various conditions upon the exchange between child and adult (teacher and investigator), and the child's competence in producing questions and narratives. It was carried out in two first-grade classrooms of a school located in a working-class suburb of Honolulu whose population is predominantly of Hawaiian descent.

Children were found to be more likely to volunteer narratives in recorded conversations with a familiar adult when they were not answering questions. An explanation is advanced that individually directed questions tend to be interpreted as negative attention, even in friendly conversation. Evidence is presented that the children have the competence to produce questions in standard English forms, even though they rarely produce these forms. The conclusion is reached that typical forms and conditions of communication in the classroom are not ones most productive for the children. This reflects differences between the cultures of teachers and pupils.

THE MEANING OF QUESTIONS AND NARRATIVES TO HAWAIIAN CHILDREN[1]

Aina Pumehana is a modern community located within commuting distance of Honolulu. As an Hawaiian Homestead community, a sizable part of its population can trace ancestry to the original inhabitants of the islands, since it is necessary to establish 50 percent Hawaiian ancestry in order to lease a lot on the Homestead. The people of Aina Pumehana consider themselves to be Hawaiian in the overwhelming majority of instances, the younger as well as the older. The community has the reputation of being a country place. It lacks agricultural employment, however, and is bordered on one side by modern, inexpensive tract houses.

In the latter houses live military families, a few professionals and operators of businesses, and workers in local industries, retail businesses, and military installations. Aina Pumehana is in fact a suburb in the state's largest metropolitan area. The people of Aina Pumehana are employed in Honolulu and other parts of the area, but not in so many occupations as their immediate neighbors. Half of the employed men in Aina Pumehana are in semiskilled occupations. They are heavy equipment operators, truck drivers, policemen, and firemen. One-fourth are in such skilled occupations as pipefitting, cable-splicing, carpentry; or they work as foremen. Fewer than five percent are in any kind of white-collar occupation and none is a proprietor, executive, or professional. The remaining 19 percent, mostly younger men, are in unskilled jobs.[2]

The educational level of the men is rather high: 65 percent of the men under 30 years of age have finished high school, and the number appears to be increasing.[3] Despite its popular image, it is not a poverty community. It lacks the high rates of unemployment, low average wages, and fatherless families typical of poverty communities. Family income averaged $600 per month in 1967, in part because wives and other family members typically work.[4] Since housing costs are so minimal this income is available for other expenditures.

Families are large. Households with children average 4 children and 2.46 adults each. Women over 45 years of age have had 6.17 children on the average.[5] Children are welcomed. Many parents are eager to adopt children in addition to their own.[6]

Given these facts, one might expect the children of this community to do rather well in school, compared with those from poverty communities on the U.S. mainland. Some do, but the great majority perform well below national norms in school. Nearly 100 percent of the students in the first three grades, for example, scored below the 15th percentile on reading tests in 1966. Approximately 70 percent of the 10th grade in that year scored below the 25th percentile on standardized achievement tests. A large proportion of the 14-year-olds read at about the second grade level of competence.[7] Such an astonishing outcome is difficult to explain. Prejudice with its self-fulfilling prophecy of poor performance can be ruled out in this case. Teachers do not express the belief that Hawaiian children are unable to learn. There is no evidence, and no traditional belief, to this effect. Rather, teachers are inclined to insist that Hawaiian children are no different from any other and can be taught in the same way, thus justifying the view that they are not different.

The primary assumption of the present study was that poor performance in school was a result of the lack of fit between attitudes and behavior patterns of the children and those required by the school. Behavior patterns required by the school might be lacking in the children, or the school might interfere with attitudes and behavior patterns of the children and fail to take advantage of them. The attitudes and behavior patterns that have the most important effect upon the children we have found to be those involved in communication. This is more than a matter of language. While the children's speech has often been suspected as a cause of poor performance in school, the author's observations lead to the suggestion that other aspects of communication may be more important for Hawaiian children. The form of exchange between child and adult and the conditions in which it occurs will affect not only what is said, but also how involved the child will become. His competence in producing forms of speech is just one factor.

The present study explores these aspects of communication, their consequences, and possible causes. For example, recitations in observed classes were puzzling and often frustrating to the teachers. When the teacher asked a question, at least a dozen hands would usually shoot up, and before anyone could be recognized and reply, several would blurt out the answer. When an individual did have the floor, he sometimes spoke confidently and sometimes shyly, but did not volunteer any information not called for. Often a child would gain recognition and then have nothing to say. Reports to the teacher on the behavior of other children meanwhile would interrupt any other communication. An attempt has been made to write generalizations that will make sense out of these observations and simultaneously relate them to other behavior observed, such as the children's reluctance to address adults on some occasions but not at other times. These will be presented herein.

A consideration of possible causes has led to consideration also of the children's competence in formulating and comprehending questions and constructing narratives. These findings follow those just mentioned.

The study was carried out in the elementary and intermediate school in Aina Pumehana, which is attended by the great majority of children from the Homestead.[8] Most of the data reported were obtained in a class which was visited in grades one and two from September, 1966, until February, 1968. This class is hereafter referred to as Class One. Only one of the approximately 30 students in this class was a Caucasian. Four were Samoan, the rest Hawaiian. Some data reported herein were obtained in a second first-grade class studied in 1967-68 (referred to as Class Two). Three of these 27 students were Caucasian, the remainder Hawaiian. Some of the ideas were developed through the observations of Nancy Reid in a third-grade class during 1966-67. All of the classes were composed of children not selected in any special way.

Data were collected by means of participant observation and tape recordings in Class One, and by means of a tape-recorded test of oral production in Class Two. This test was administered near the end of the school year by an observer who had likewise participated at frequent intervals in class and playground activities.[9] During the first year in Class One the author was able to develop several roles. These included a kind of older friend on the playground and at times in the classroom; a teaching assistant when he was left in charge of the class alone or with the regular teaching assistant; and a teacher when conducting certain exercises in reading readiness. Instructions for the latter were prerecorded by the teacher, so the children were used to playing the tape-recorder for these lessons. They found the machine both interesting and somewhat frightening at times. Opportunities to record and hear themselves were offered by the author during conversations with the children and at play. Over the course of the first year all of the children talked on tape outside of lessons. Only 14 of these children have been included in the present analysis. One boy, for example, although he recorded five times, said too little each time to be scorable within the limits of the categories described below. Others were excluded because they lacked reading test scores, and priority was given to those who had them in order to complete as soon as possible an analysis of the correlates of reading ability.

In Class Two the Oral Production Test II, developed by the Dade County Board of Education in connection with the Miami Linguistic Readers, was administered. This test was obviously too complex for these children, but it produced some interesting data about their understanding of questions, which will be presented later. Most of the children found it very interesting and the situations depicted to be understandable on the whole. After going through the pictures and talking about them with the observor, they were asked a standard series of questions while looking at the same pictures, and their answers, together with anything volunteered during the session, were recorded on tape. Since every effort was made to conduct these sessions in private, the pressures of competition with other children were minimized --unlike the situation for the recordings in Class One.

The talk of the children in Class One was almost all with the author. The technique did not allow good quality of recordings of speech between children. Such communication, as well as that between the teacher and the children, was observed, but no verbatim recordings were possible.

The sections that follow describe and analyze two forms of verbal communication: questions and narratives. Beginning with some of the behavior patterns in the classroom that provide the context, the account next considers the relative productivity of these two forms. It appears that children respond to adult's questions much less volubly than to other kinds of remarks, even when such questions are part of a friendly conversation. They themselves ask adults relatively few questions. The reasons for this preference for other forms of communication are sought in the social functions and meaning of questions, as well as in the children's relative competence in handling questions and constructing narratives.

Behavior patterns in the classroom

The children appeared to use their own initiative in undertaking a particular activity or trying to complete it, as illustrated by the following episodes:

> At one point one of the boys brought the whole session at the listening station to a halt while he straightened out the cords to the headsets. He never asked, he just went ahead and did it.
>
> V. asked E. (the observer) for a Bandaid, and E. did not get it, insisting that he had to do his work first. He asked E. again after the work was over, and again E. did not get it. He thereupon got out his health card from some place in the teacher's desk, took it to the health room, returned, and

showed E. the Bandaid and the card.

The teacher reprimands J., who had just finished drawing two beautiful designs from a storybook on the board, each just like the other. This was going on during her questioning of the class. She tells him to go back to his desk. He does, gets out a paper, and starts to draw on it. Later he goes back to the board and draws.

The class is supposed to be all in a group, listening to the teacher. F. is coloring, then cutting out and pasting at his desk. After a while the teacher has the class say to the teaching assistant, "Please, Mrs. D , teach us a song." As they are learning the song, the children follow Mrs. D very closely. F. continues his pasting. The part of the class which came early now leaves. The teacher makes F. stop his work in order to join the class. He opposes her. She finally has to threaten to tear up what he has just spent 40 minutes working on before he will agree to quit.

Just before the teacher left for the day she handed out assignment sheets. After she had been gone for a few minutes, leaving an older girl in charge, the observer noted a great deal of absorption in work. Some were working on the assignment sheets and others on different assignments.
They did not leave their work despite the presence of a set of real telephones, which had been very popular during the day.

Self-initiated activity is a pervasive fact. It is consistent with children's preferred form of communication, which is a volunteered narrative.

In volunteering narratives, they do not ignore the adult's wishes, as they do in the above episodes; but they take the initiative in both cases.

Equally pervasive is the children's orientation to one another. They are almost continually copying, helping, amusing, competing with, arguing, or fighting with one another. Interaction among themselves frequently interfered with doing assigned work but also promoted it, as they showed one another what to do and tried to avoid being outdone, The same behavior pattern showed up in conversations with the author, when one child tried to better the story of another, causing the first child to say more than he otherwise would.

The children's tendencies to schedule their own activities and to involve themselves with one another make it difficult for the teacher to attract their attention and to direct them as a group. This did not keep teachers from trying. A large proportion of time in Class One and other classes is spent in routines, scoldings, and threats aimed at attracting attention and switching children from one activity to another. Many classes are successfully controlled by the teacher, but the kinds of communication favored in such an environment fail to maximize the verbal productivity of the children, as will be seen.

There are two significant exceptions to the general tendency to ignore the teacher: seeking assistance and telling the teacher something. Both occur under similar conditions. The child's behavior when seeking assistance was puzzling at first. Experiments with younger children in the community carried out by Ronald Gallimore demonstrated a marked tendency to ignore the adult experimenter when faced with an impossible task and not to seek his help. These results differed significantly from those with local children of Oriental descent.[10] Yet, in the classroom, children a few years older were frequently observed approaching teachers as well as observers with requests for help with clothes, assigned tasks, and other problems. Some of these attempts were similar to the following:

> The children were doing addition and subtraction with the numbers that add up to 5. The teacher had shown them how to do the assignment by using the fingers on one hand. R. came up to the observer again and again to ask how to do each problem. He was put through the steps, with fingers held up, taken away or added, etc., and asked how many were left. He started doing the first step himself when asked to, and each time thereafter did more of it himself with urging. The observer continued to go through the steps himself, however. Finally, the child did the whole of a problem without any prompting, but still would not write down the answer until it had been confirmed.

A similar example appears on page 18 below.

One interpretation of these episodes is that children are reluctant to approach an adult for assistance until they have some cue that he is likely to help. Hence in the experiment cited, the relatively unknown, even though friendly, experimenter in a novel situation was not approached; but observers and teachers were approached for assistance under certain conditions to be discussed. Once an adult has provided help the child persists until he finds out just how far it will go. The same conditions apply to telling the adult something, as will be seen; the child has to feel that the adult is receptive before he tries.

Narratives and Responses to Questions in Conversation

The form of communication that was most productive in the recorded conversations with the author was a narrative, a form significantly more productive than responses to questions. This finding will be documented first, and then the possible causes will be discussed. Specifically, whether this difference is a reflection of linguistic competence or of the social functions and meaning of the two forms of communication will be considered.

Actually, the children's recorded responses to questions and their responses to other verbalizations were compared. Logically, a narrative can be a response to a specific question, such as, "What happened?" or to any question, as a way of carrying on a conversation. Empirically this happened on occasion, as narratives of greater or shorter length constitute the great majority of all of the children's utterances. But obvious narratives were more likely to be volunteered, or to follow encouraging comments by the author, than they were to follow questions. For convenience, responses to questions (referred to as answers) and responses to other verbalizations (referred to as narratives) have been considered separately. Responses were elicited in the following manner.

Conversations began while the author was engaged in a variety of activities with the children as described above. A child might say, "Steve, I want to talk," or reply affirmatively to some such question as, "Do you want to talk for me?" When the machine was switched on the child usually began to speak just after a comment like, "O.K., go ahead," or a question like, "What do you want to tell me?" Once started, the author's only purpose was to prolong the conversation in order to obtain as full and uninhibited a flow of speech as possible. At the time no thought was given to the analysis presented here; rather, interest was focused upon obtaining samples of so-called "pidgin." The author used his patterns for maximizing speech by young children: showing interest, occasionally suggesting topics such as games, allowing time for responses, acting spontaneously, etc. His own patterns of conversation led him to ask frequent questions, in part to minimize embarrassment stimulated by silences. As he became vaguely aware of the non-productivity of questions, he tended to shift towards comments, or combinations, such as a comment followed by "Huh?"

Efforts were made to restrict the conversations to a single child by using the concept of turns, developed in other activities and familiar in the relationship. Other children were often present, however, and their interferences were sometimes recorded on tape, sometimes not. This is one major source of uncontrolled variation in the data.

Thirty-five passages of conversation between the author and the 14 children have been analyzed in the following way. First, key statements, or themes, were isolated. These were assertions which could be related to other statements, usually more detailed, more or less as the topic sentence of a paragraph of writing could be. The point of introduction of these key statements was taken to be that at which any one of the related statements appeared. This was usually, but not always, within one or two statements of the key statement itself. This analysis was made initially by Ann Berens, who likewise carried out the other coding of these data. No reliability measures were calculated, since the number of disagreements as to what key statements were did not exceed a half-dozen.

Second, every verbalization by the author was noted and classified as either a comment or question. Comments were usually a brief "yeah" or "uh huh," rarely a repetition of a child's phrase followed by "yeah." Questions were classified as yes/no questions or wh- questions. The former were all of those questions that could be answered minimally by a yes or no, including tag questions, such as "She getting big, huh?" and "You were scared, too, huh?" Wh- questions begin with a word like what, where, or how, and cannot be answered by yes or no. Comments and questions combined were treated as questions. The number of questions asked in a single utterance was ignored. It was usually one or two, but in one utterance there were nine!

Third, every verbalization by the child was classified as a response to a question, to a comment, or as initial. A verbalization was considered a response to a question if it immediately followed the question and did not completely ignore the question; otherwise it was grouped with responses to comments in the analysis. This was done in order to refer to responses to questions as answers. Verbalizations that immediately followed comments were considered responses to comments. Initial verbalizations were those which began the recorded passage. While these might have followed a question, a comment, or both, before the machine was turned on, they are fundamentally different from answers and responses to comments in that they allow a longer time for preparation. The justification for considering them separately will appear in the discussion of results.

The first finding is that the great majority of key statements appeared following comments, or initially. This was true of 11 out of 12 children for whom this comparison could be made. Only two of these 12 made more than two key statements in response to questions. Such a result could not be due to chance. A child is more likely to think of something to say after a comment or after agreeing to talk than he is following a question once he has begun to talk. Moreover, most children did not produce more key statements initially than they did in response to comments: only four out of 12 did so.

Why should this be so? One explanation that suggests itself is that the children stayed close to the question in replying and thus did not think of new ideas. There is some support for this interpretation in the fact that they overwhelmingly attempted to answer the questions. Only two out of 14 children ignored as many as 20 percent of the questions asked them in their replies. The average is under 10 percent. But this cannot be a complete explanation. Nothing would have prevented a child from answering the question first and then offering a key statement, nor indeed offering it as an answer. That is, in fact, what one boy did. He made some attempt to answer 98 percent of the questions addressed to him. While doing so he made 50 percent of his key statements, thus constituting the sole exception among the 12 children mentioned above. Such a performance is often expected in these classes. The question of why more of these children did not perform this way remains. Further consideration will be given to it.

The second finding is that initial verbalizations and responses to comments are more elaborate than responses to questions. Elaboration was measured by counting the number of unrepeated statements that a child made initially, or following a question or comment, before another question, comment, or key statement occurred. A score of one was counted for each complete statement and part of a compound sentence. A single phrase or word, if it were an adequate answer to a question, received a score of one. A zero was scored for other single words or incomplete sentences and also for any exact repetition of an immediately preceding utterance.

The number of statements depended to some extent upon when the author spoke, but this tended to be uniform: that is, the author let the child talk as long as he would. Repeated questions were likely when he failed to understand. But offsetting this was a tendency to make reassuring remarks when the child was still speaking. Neither type of occurrence, however, was frequent.

Table 1 reports the mean number of statements by each child in answer to questions and in response to other verbalizations: i.e., initially, following comments, and when ignoring questions. The number of occurrences on which each mean is based appears in parentheses. Separate passages for each child have been combined for this table. As it shows, the difference between the mean number of statements in answers and that of other responses is statistically reliable, despite the very small number of observations on two of the children.[11]

Insert Table 1 about here

The mean number of statements in response to each type of question (yes/no questions and wh- questions), initial responses, and the residual category (responses to comments and when ignoring questions) for each passage, rather than for each child, shows seven out of 16 passages (64 comparisons) in which initial responses or the residual category averaged less than responses to one of the two types of questions. Every other comparison is in the predicted direction in the overwhelming majority of instances. In about half of the passages where comparisons can be made (12 out of 22) and also among half of the children (five out of 10), answers to yes/no questions exceed in length answers to wh- questions.

TABLE 1

Mean Elaboration Scores

Answers	Other responses	Summary of analysis of variance:					
0.85 (58)	1.75 (30)		Sum of squares	df	Mean square	F	P
1.62 (16)	4.70 (20)						
0.35 (14)	1.40 (14)						
1.63 (44)	2.53 (48)	Total	47.11	27			
1.00 (10)	2.30 (13)	Subj.	17.57	13			
0.60 (21)	1.50 (16)	A vs O*	19.17	1	19.17	24.02	< .001
1.53 (56)	2.07 (38)	Error	10.37	13	.798		
0.50 (4)	4.00 (2)						
0.83 (61)	1.23 (39)						
1.27 (46)	2.43 (27)						
1.15 (18)	3.90 (17)						
1.25 (4)	2.11 (9)						
1.50 (4)	6.00 (1)						
0.77 (15)	2.10 (21)						

*Answers versus other responses

Clearly one of the two forms of questions is not more productive than the other on the whole.

Assessments were also made of the fluency and intelligibility of the responses. These will be described later. Fluency scores averaged higher for answers than for other responses, in part because there is a tendency for each child's longer verbalizations to be less fluent, and other responses tend to be longer, as has just been seen. Further attention will be given to these relationships in the discussion of competence below.

The functions of questions and narratives

Returning to the question of why children should find it easier to think of something to say and to say more when they are not answering questions, there are, as noted earlier, two possible causes: (1) that they are less competent in handling questions than in constructing narratives, or (2) that the social function or meaning of questions is negative, compared with that of narratives, and thus diminishes verbal productivity. Anyone who has participated in Hawaiian culture will suspect immediately that the important factor is the social function of questions and the associated meaning. But there is also the likelihood that the structure of questions in local Hawaiian English differs from that in the standard English spoken by the author (and many teachers). Some evidence to this effect will be presented below. If this is true, the author's questions might have been a source of difficulty for the children. Before this line of explanation is pursued, however, the functions of questions and narratives will be examined.

Inferences about the functions of questions and narratives can be drawn by comparing the circumstances in the classroom in which children answered questions or failed to answer them, and in which they volunteered information or asked questions. Further comparisons can be made of their interaction with the author in these respects. Systematic comparisons of notes taken over a period of a year lead to the following generalizations:

(1) Children answer questions when they have been addressed as a group, not as individuals, provided several know the answer. Such answers are volunteered. For example, the teacher would write something on the board and cover it up, telling the children before she did so to hide their eyes. Of course, they did not do it, as she knew, and as soon as she asked what they were not supposed to know, many blurted it out. The strength of this impulse is unmistakable. The same thing happens when the teacher is addressing questions to the group, as happens at times in class discussions. Individuals rush to answer before being called upon. At other times, she would call upon individuals or scold those who spoke without being recognized. Many were reluctant to answer then, although some, perhaps not recognizing the difference in the two situations, continued always to blurt out answers.

(2) Children answer questions when they are striving not to be outdone by other children, provided they have not been called upon individually to speak. Thus other children would attempt to answer questions directed by the author at the speaker while recording. Conversely, it was noted on many occasions that the length of the speaker's utterances increased after another child threatened to take the author's attention from the speaker. This, in fact, probably accounts for most of the passages in which answers to questions exceed other responses in length. Being called upon in front of a group changes all of this: then the child is eager to avoid competing. If he answers at all, it will be shyly and

minimally. He may not even deliver an answer which he has just uttered!

(3) Children answer questions when they know the answer. This obvious fact accounts for several further observations. Thus yes/no questions asked in class are more likely to be answered because they are cognitively simpler and are often answered in unison (also an illustration of generalization 1). Good students are more likely to answer questions directed at them individually--as every teacher knows. But a mediocre student who is responding to questions about a story that he has volunteered to tell will also attempt to answer questions. This is in fact a description of the recorded conversations with the author. Recall that the average child in that situation attempted to answer over 90 percent of the questions directed at him.

Insight into the meaning of questions to the children is provided by the following incidents in which they refused to answer completely, or partially:

> A boy and a girl asked E. (the observer) to help them with an assignment: to draw a line from one numeral to the next, outlining a figure. About half the class got it wrong on the first try, and the teacher collected the papers, repeated the instructions, and handed out new ones. E. asked each one to count when asked where to draw next. They did well at this at first, but then started to balk at counting. They were told to look up on the wall, where numerals were illustrated. As the task continued, they balked more, saying that they did not know what followed two, and even one.
>
> E. came up to O., who was sitting and daydreaming, asking him what he was supposed to do. He smiled but did not

> begin work. N. did not answer at all when asked what she was supposed to be doing. She went on coloring.
>
> At one point when walking around the room checking the work that the children were doing, E. asked T. what he was doing and he said coyly, "What you want to know for?" He did not show what he was doing.
>
> F. comes over to E., rapidly pointing with his finger at his glasses, says something, and promptly returns to his seat before a reply is given. Later, leaning over to him as he works, E. asks him what he said to him about his glasses. F. does not respond. There are several of his papers on the floor and he says, "Put them in my desk." E. tries to do so but there is no room. As E. moves back, F. hits him a couple of times with his pencil.

In the first instance, the author was not giving the child the information asked for and in addition increased the likelihood of failure by asking the child questions. In the second and third instances, the author is not apparently frustrating the children in this way; but he is obviously checking up on them, and his questions appear to be so interpreted. Is there anything that links these episodes besides the refusal to answer questions? A year later one of the children asked whether the author ever "checked" his children. He said that he "bawled them out." The questioner did not understand that, but it turned out that this was what she meant by "checking" them. This suggested that there might be an association between a scolding and being asked questions--at least under certain conditions. If parents use questions when scolding their children, then one way of interpreting the boy's behavior in the fourth instance is that he is behaving like the parent, saying, in effect: "No, you are not going to check me by asking questions. I am going to tell you what to do." That children would tell the author what to do when he frustrated them is illustrated by the following instance:

> Y. told E. to come over. When he went she asked him how to spell the name "Pap." He told her to look at J.'s paper, which had it correctly. Instead of doing so, she told him to write it on her paper.

This episode resembles the first one above. In both, the children are attempting to force the author to do something when he frustrates them. When an adult is frustrating them or "putting them on the spot," they will likewise refuse to answer questions.

The conditions that lead children to volunteer information to an adult are nearly the opposite of those just discussed. These conditions, while varied, have one thing in common: they provide cues that the adult is receptive. The cues are as follows:

(4) The teacher invites them to discuss, "share" experiences:

> At the end of the count of 10, when the whole class is supposed to be sitting on the floor, D. is not there. Instead, he goes out the door of the class and walks down to the other door standing outside. One of the children calls the teacher's attention to this, and she says, "D. is being stubborn." She then engages the class in a conversation about being stubborn, asking them if they know what it means to be stubborn. Someone suggests that it means to be sad. Someone else says it means bad. The teacher says that G. was stubborn yesterday,

> imitating his voice. The teacher says that you are stubborn if someone asks you to do something and you say (demonstrating) "No, I won't do it!" At this point one of the children says, "Yes. They ask you and you no like."
>
> Mrs. H., the teaching assistant, leaned over and was about to faint. After the teacher had helped her from the room, the children crowded around the door to watch. When the teacher returned, there was a great desire to talk about what had happened. The teacher told them what had happened and then called upon children. R. told the class a story about a woman fainting. When called upon, F. said that her mother fainted once. The teacher continued the discussion, saying that it was like falling asleep. U. volunteered a story when called upon, and then N. told about seeing Mrs. H. start to fall over. When O.'s turn came, he told about seeing his mother leaning against a fence one night. The teacher then went on with the art lesson. L. put up her hand, waited to be called upon, and then told about her aunt fainting one time.
>
> The whole class was in a group listening to the teacher, who was leading them in a discussion. No one had "opted out" at the start. She was asking them what fairies were. A number of suggestions followed.

Note that the teacher is herself conversational and non-punitive. In the first episode she does not scold or ridicule D. She may even perform, as in the same episode. She does not ask individual children questions that "put them on the spot." Under these conditions, the children really pay attention and open up. It is rare that no one withdraws at the start of a group activity. F., who spoke in the second episode, almost never opens her mouth. Moreover, the children's volunteered remarks lack the competitiveness noted when they are answering questions. They wait patiently and do not speak until called upon--again a rare event. But note also that the teacher seemed to regard such sessions as interfering with her teaching plan--as digressions. She did not seem to recognize that they were among the most effective events in her class. Neither did the author at the time.

(5) The author has overlooked the speaker's immediately preceding misbehavior:

> At nap-time the teaching assistant came into the room. She said as soon as she entered the door, "There's too much noise in here. Quiet down." E. (the observer) had been saying nothing and continued in the same way. M. put his mat on the floor nearby and said to E., "Are you going to stay over here?" or words to that effect. K. was already lying in front of where E. was. He asked, "What's my name?" M., while lying down, told E. where he lives called my attention to his paper, which was up on the board.
>
> Twice in a few minutes, N. falls off her chair at her desk, which she had been kicking. She is ashamed of herself and looks at E. shyly. The teacher is trying to conduct a lesson before the whole class. N. leans over to tell E. that she used to live on Maui. E. smiles at her, and she repeats this information, adding that she used to live on the mainland also. Deciding to talk with her, E. asks whether she lived by herself on Maui or lived with somebody. She says she lived there with her father, her auntie, and her grandmother. A few minutes later she comes over

> and looks at the paper on which E. is writing, points, and says, "My name." She comes back again, turns the paper over with her finger, and says, "There it is," adding, "that's where I lived," pointing to Maui on the notes E. had just written.

The implications of these episodes to the author are quite significant, because each one surprised, or mystified him at the time, and they were set down very carefully for this reason. In the first instance the sudden approaches by the two boys were unexpected. What had happened, it now seems obvious, is that the author had not participated in, nor reacted to, the customary scolding that the whole group had just received from the teaching assistant, a mother in the community. In the second instance, the initial absence of any comment from him under similar circumstances stimulated the girl to open up a conversation. And note the girl's reading. She picked out in cramped script the abbreviation of her name and the word "Maui." This from a girl who could not read foot-high letters on the wall!

(6) The author has just consoled another child in the presence of the speaker:

> D. sat down and started to cry. E. went over and put an arm around him and asked him what happened, and he said that he did not get a chance to use the (real) telephone. E. told him to go over and take the phone. E. got on the other phone, and E. and D. talked for a few minutes. D. was finished and said good-bye. As soon as he was finished, V. came over and picked up the phone and started talking to E., who noticed after a little while that V. was talking for a longer time following E.'s comments. V. began talking about his two younger brothers. At

> a certain point, he became oblivious of anything around him and told a long, involved phantasy about his father taking him to the University, where he had won a foot race and a trophy. He then launched on a detailed story about a mother cat and nine kittens he had and how he cared for them.
>
> As soon as E. walked over to the group listening to the story, A. motioned for E. to sit down beside him. E. did, and A. immediately asked if he could sit on E.'s lap. E. let him do so, and A. asked after several minutes if it was uncomfortable for E. A. held E.'s hand. Y. was sitting close to E. on one side and O. on the other. A little later T. moved in between O. and E. There were several comments from A. to the effect that E. was his father. The others sitting nearby discussed this also.
>
> E. sat with the whole class as a group during the time the teacher read the story. U. leaned on E. during most of this time. D. told E. about how he would shoot cows and they would die. He asked if E. had seen (met) his father.

The last two episodes were typical of many others. As soon as one child sat in the author's lap, others would join in as well as they could, and remarks, news, and discussions would be volunteered. This pattern was recognized at the time, but not related to the incidents cited earlier. It is possible that it relates to a family experience that sets up an association between closeness and conversation. Several fathers reported in interviews that when they got down to play with their children as soon as one began, all the others would pile on. Such episodes might well lead into verbal kidding and "talking story": the term for conversation. Other kinds of consoling, as in the first instance, also stimulate verbalizations addressed to the adult, although in this instance the verbalization ended up being addressed to an unseen audience. Its quality was noteworthy because it is the only account by this boy over a year's time in which he does not express some aggression towards animals and their babies.

(7) The class is being urged to do something and children eagerly volunteer that another child is not doing it, or that they are not going to.

This cue is different, and so are their verbalizations. The teacher is not indicating her general receptivity to talk, but instead is demanding compliance. The children's verbalizations are reports, unexpanded, which relate directly to the demand. There is one basic similarity: the children speak when they assume that the adult is receptive to the message. It is puzzling that they appear to assume that the adult wants to hear that they won't do something ("I no like"). But the aplomb with which they say it and the lack of apprehension suggest that they do not expect trouble when uttering it. In any case, such information is volunteered in circumstances that differ from those in which questions are not answered. Where answers are not forthcoming, trouble seems to be expected.

That children volunteer information when the adult indicates his receptivity also helps explain why so many blurt out remarks when the teacher addresses a question to the class: by doing so she announces her receptivity to communications. The remarks then often have nothing to do with the question. The same thing happened after a while when the author set up his tape recorder:

While E. was setting up the tape recorder, M. and W. came over to tell him some news. Very soon thereafter a number of other children came over asking to record. While suggesting various topics, they became excited and began to shout. The teacher called the group down for making too much noise.

Few additional generalizations can be made about the circumstances in which children themselves asked questions. The necessary data are not complete, partly because they asked few questions. Over a 12-month period, approximately 20 children in Class One produced about 59 questions in their recorded conversations, and 25 of these were produced by one child on one occasion. In the Oral Production Test situation, the 27 children of Class Two produced 44 questions, a much higher rate. (Monosyllabic questions like "Huh?" have been excluded from both counts.) While it is clear that children do not ask adults many questions, this depends upon circumstances. When they want information or interpretation in an unfamiliar situation, such as that posed by the Oral Production Test, and a friendly adult is present, they ask relatively more questions. As the examples of the questions given below indicate, they were puzzled.

They also occasionally asked questions in conversations with the author, as illustrated at the conclusion of this section. Since they appear to regard questions as appropriate in conversations, why did they not ask more? The answer may be that they regard the asking of many questions as part of the adult's role. When the adult asks many questions, this role is emphasized and they do not ask questions. The child who asked the author 25 questions on one occasion was in fact taking his role: she interviewed him--much against his will! Children by contrast ask many more questions of one another.

Since questions are occasionally part of a friendly conversation, they are likely to occur when the adult has given a cue that he is receptive. When the child is requesting action from an adult, however, he may interrupt. Children would interrupt instructions to request an activity, to ask to start over, and to obtain assistance with a task. They would also interrupt to request that the author write their names or his, to borrow his pencil, etc. There is no evidence that they volunteered extensive information or tried to start a conversation under such circumstances.

The question intonation when making a request differs from the regular question intonation, as if a tentative suggestion were being made. For example:

1 1 2 2 1
you can write your name

1 1 2 1 1
I like to listen

These are intermediate between the regular question intonation:

1 2 3 1
(I like one dime.) You get one dime?

1 2 3 1
Can I take off your eye glass?

and an imperative form, such as:

2 2 2 2 1
Let me use your pen.

It appears that there may be three functions of questions asked by children: to obtain information, broadly considered; to carry on a friendly conversation; and to obtain needed assistance from a teacher. The first two of these are likely to occur only with cues that the adult is receptive. All are more probable in a novel situation, perhaps.

The following episodes illustrate a number of generalizations contained in this section:

When E. entered the room after nap-time, U. was the only one in the room. She was sitting at her desk quietly. She said with a smile, "I ready." E. asked her what she was going to do and she looked down and acted shy. E. said that she was too shy to do anything, teasing. Several others came in and sat down at the table and C. said, "She's ugly." E. said that she was not ugly, she was shy. C. then said to E., "You too nice." It turned out after some exchanges that she meant E.'s shirt was pretty. E. told her that she had a pretty dress on, too, and also that L. had a pretty dress. C. then asked whether E. had a father, and E. told her that he was a father. The girl sitting opposite said, "Did your father die?" E. said, "Yes, he did. He was an old man." She made a comment about old people dying, and E. said that it was true. She then said to E., "But you are old," and E. said that he would probably die some day, too. He was then asked whether he had a wife and he said that he did. Someone asked whether his wife had a mother. When he said, "Yes," the same girl commented, "She did not die?" E. said that was correct and she said, "She was not old."

When the red group came up to the listening station, it was very difficult to get their attention. Most did not want to come in the first place. Several had brought drawing paper over to work on instead of doing the assignment, and E. had taken these away. V. kept leaving the table, and refused to work many times when E. insisted. He, U., and T. would not

> answer any questions or do any work at all. E. finally stopped trying to go on with the lesson and started to talk with them about the things he wanted them to learn. After some pouting, they finally started to converse with him on the subject, and from then on, he began to record their answers.
>
> E. spent a half hour with U., dragging the assignment out of her bit by bit. This was the one that she had refused to do earlier in the day. At the start, she would not even answer whether she had ever seen a Halloween mask before. Y. came by, and E. told her that U. was being stubborn and asked her why people were stubborn. After this point U. tried to answer.

In all of these cases the author was frustrating the child and also "putting him on the spot" with questions. The child was refusing to answer and not volunteering anything. Somehow or other a conversation got started. Then the children started to volunteer comments and ask questions. The result in the first instance was a probe into the relationship between death and age, conducted by the children. The other two instances were less productive because the children were not allowed to direct the resulting conversation.

Understanding and use of question forms

One possible cause of the low productivity of answers to questions may be that children lack competence in constructing and interpreting the questions addressed to them by adults. According to this argument, the complexity of interpreting the question while organizing a reply could limit the volubility of the response. Questions in standard English usually involve an ordering of parts that differs from that of declarative sentences corresponding to a particular question, plus additional words such as auxiliary verbs and wh- words in certain types of questions.[12] These points will be illustrated below. Evidence presented there indicates that the form of question commonly used by the children is different from the standard English form, giving this argument some plausibility.

Evidence of the children's competence in handling questions was obtained in two ways. The first was to determine whether a child's answer to a question made sense, i.e., was related or not to the question. If it did, one can assume that he was able to interpret the form of the question, understood the semantic references, had the necessary information and schema to answer, a motivation to answer, and the competence to construct the reply. If a child's answer failed to make sense, on the other hand, one cannot infer without further evidence which of these factors was deficient--although teachers often assume that it is the information or schema alone.

The second way of inferring competence was by performance. What are the forms of questions that the child asks? If he is capable of producing a question with a certain form, the rules of language are such that one can reliably infer an ability to interpret questions of the same form, provided the necessary references, information, motivation, etc., are present. Once again, failure to produce questions with a given form does not lead necessarily to the inference that a child lacks the competence to produce the form, although it does suggest this, if a large amount of his speech has been scrutinized.

Imitation as a technique for assessing competence was not known to the author at the time these data were collected. But there is one interesting response to be cited that was accidentally obtained in this way.

By using both of the methods described, the children's competence in handling question forms in standard English was assessed. Briefly, the evidence to be presented indicates that the children of Classes One and Two rarely produced questions that involved auxiliary verbs or a reordering of sentence parts. But a few did so occasionally, and the reordering of sentence parts that occurred in their questions rather strongly suggests an ability to interpret questions in standard English, even though they are rarely produced. Moreover, there is strong evidence from Class Two that the children rarely failed to understand typical forms of questions in standard English when they had the necessary references, information, etc.

Twenty-one of the 44 questions produced by children during the Oral Production Test made use of subject, verb, and object (SVO) (if any) in the same order in which they appear in a declarative sentence. An additional 14 lacked either subject or verb. Thus the great majority lacked any reordering. Thirty-one lacked auxiliary verbs (for this purpose gonna, gotta, want to, etc. were not considered auxiliary verbs).

Of the 59 questions asked in conversations with the author, 35 had declarative SVO order and nine lacked subject or verb. Forty-three lacked auxiliary verbs. The following are the types of questions asked in both settings.

Questions lacking S or V:

Get swings?
What car?
Where you mudda?
This (one) all worms?

Questions consisting of declarative sentence with question intonation (Sentence plus Q):

Your sons clean the yard?
On June we gotta buy fire-crackers?
I not going hear? (Note declarative ordering of negation.)
I like go fishing (?) (This is the "suggestive" question discussed above.)
You want come wit me fish? (This was given as a reply to the question: "The father is asking the boy if he wants to go fishing. What question is he asking?")
Come on, you want to go fishing? (Volunteered in talking about the same picture.)

Questions consisting of declarative sentence plus one-word tag (Sentence plus tag):

At's bird fish, yeah?
Them is fishing, yeah?
I can go fishing with you, O.K.? (Note auxiliary verb can.)

Yes/no question consisting of (you plus verb plus noun phrase):

You like em? (Reported speech.)
You gotta bring your childrens to the playground?
You mean this hand?

There are constructions comparable to each of these that use wh-words. The simplest of these, consisting of wh- plus noun phrase, appears above. Others are as follows:

Wh- question consisting of (wh- plus sentence):

How much she sell the books?
How come they no put the house in? (Note declarative ordering of negation.)

Wh-question consisting of (wh- plus you plus verb plus noun phrase).

How come you neva turn on that?
How you know?
What you caught?
What you talking about?

All of the question forms used most frequently by the children have now been illustrated, with a few minor exceptions. Many of these questions would not appear to be very common in standard English.

The order of parts in a declarative sentence is changed occasionally, however, both in yes/no and wh- questions. Note the following:

Yes/no question consisting of (auxiliary verb plus subject plus verb plus object):

Can I take off your eye glass?
Do you play with the children?
May I go to fishing?
Are you drinking your milk?

Wh- question consisting of (wh- plus auxiliary verb plus subject plus verb plus object):

What's she doing?
Why did the man throw out the clock? (A riddle.)

Reordering occurs without auxiliary verbs in the case of wh- questions, as follows:

Wh- question consisting of (wh- plus object plus verb plus subject):

What kind is this?

Wh- question consisting of (wh- plus is plus noun phrase):

What's your mail box number?
What is "bare"?
What's my name?

The last four examples come from four different speakers.

Linguists may be interested in the suggestion that reordering appears to be correlated with the use of wh- questions by these children. To repeat, reordering of sentences occurs in wh- questions without auxiliary verbs. Auxiliary verbs appear in yes/no questions without reordering--see the example above and the following:

Dey guys can play?
They don't kick?

It seems unlikely that reordering depends upon the development of an auxiliary verb system. Further evidence for this inference lies in the fact that the children's auxiliary verb system is unlike that of standard

English in several respects. Auxiliaries wen, go, wen go and ha(d) plus present tense are often used where the simple past tense would be heard in standard English. The auxiliaries do, can, and was (is) appear to be the only ones often used by the children. Since most of these appear in questions, it is even possible that auxiliary verbs develop in conjunction with questions. Children have used Can? as a one-word question on occasion. While it may be only coincidence, the independence of auxiliaries from reordering is illustrated in the one case of voluntary imitation that was recorded. Asked, "What question is he asking?" one boy attempted to answer by repeating: "What question he is asking?"

It is interesting to note that wh- questions are rather frequently embedded in one type of yes/no question, as follows:

Yes/no question consisting of (you know plus wh- plus subject plus verb plus object):

> You know where we get our Fritos?
> You know how much EZ Bake ovens cost?

This construction, moreover, fits in with another by substituting that's for you know. Thus:

> That's when he go.
> That's why you wear em.

To sum up so far: there is evidence that several of these children produced question forms that are standard in English. Interestingly, two of the examples (one cited above) of correct wh- questions involving auxiliary verbs were riddles. This does not invalidate the evidence, for it is known from other studies that children cannot repeat from memory, even immediately, that which they do not themselves produce in extensive samples of speech.[13] The same argument applies to the questions produced during the test situation. These could not have been merely imitations of questions heard in the test. Moreover, identical forms were heard in the recorded conversations. It is even true that more complex standard wh- questions were heard in the conversational setting than in the test, indicating that the influence of the test was to restrict demonstration of the children's competence, rather than to augment it by stimulating imitation.

The evidence of correct standard English forms that has been cited is limited to a few speakers. It is possible that not many share their competence. Fortunately, the Oral Production Test provided an opportunity to estimate directly with one group of children their understanding of a large number of standard English questions.[14] The following table reports the mean number of children giving inappropriate answers to questions of a particular type, excluding certain questions discussed below. All of the questions involved reordering.

Insert Table 2 about here

At first glance there appear to be differences in the degree to which different types of questions were understood. It is true that the easiest questions for the children to answer were the or questions. These are pairs of yes/no questions, one stating a logical alternative to the other, thus: "Does the father walk away or does he watch the boy?" The most difficult by far were the wh- questions using did or does. This could not reflect a difficulty with auxiliary verbs generally, since questions involving other auxiliary verbs were among the easiest to answer. Nor could it be a difficulty with did or does specifically, since neither caused any difficulty with or questions. An examination of the particularly difficult

TABLE 2

Mean Number of Children Giving Inappropriate Answers

Type of question:	*Did*, *does*	Other auxiliary	No auxiliary	All types
Yes/no questions				2.0
Wh-questions	3.4	.8	2.5	
Or questions	.7	.8		

(Total number of children asked each question: 24-27) wh- questions suggests that these may have been ambiguous. For example:

What does the man take with him when he goes fishing?

Where does the boy have the fish?

The problem in the first question is that what could refer to many things. Answers included fishing pole, worms, bucket, net (not shown), the boy, and others. In the second question there was the problem that the fish was on a string, which was in the boy's hand. Moreover, some said that he had the fish from the river. They were then asked,"Can you say it another way by using another word for the fish?" This was understood by some to be a request for correct speech, and some did not answer at this point.

The most difficult questions on the test (not included in the table above) were the following (the number of children giving inappropriate answers, or no answers, is given in parentheses):

The boy wants to know if the man is going to the river or the lake. What question would he ask? (22 missed.)

The father is asking the boy if he wants to go fishing. What question is he asking? (24 missed.)

The mother is asking the boy if he has finished drinking his milk. What question is she asking? (15 missed.)

The fact that the three most difficult questions were the only ones on the test requiring the child to formulate a question in reply would seem to contribute evidence that many children lack competence in formulating questions in standard English. This cannot be ruled out. But a part of the difficulty may be the referents of the pronouns in the questions.

More children were confused by the first two questions than by the last one. Some answered each question as if the father were speaking, others as if the boy were. In replies to the last question, no such alternatives occurred, despite the fact that he and she are frequently substituted by the children. In the children's experience, it was clear that mothers ask boys whether they are finished, not the reverse; whereas boys who want to go fishing with their fathers may ask, or be asked.

A semantic explanation can also be given for a larger than average number of inappropriate answers to the following questions (likewise not included above):

Tell me what the boy has in his hand. (13 missed.)

How many worms are there on the hooks? (6 missed.)

There was nothing pictured in the boy's hand, nor on the hooks. Children who failed to answer appropriately seemed confused as to why the questioner would ask about something that obviously was not in the picture. (In the first question some made up something, like money.) Questions with identical structures were answered appropriately by all but a very few children.

It can be concluded from responses to the Oral Production Test that the great majority of children in Class Two were capable of giving appropriate answers to questions in standard English involving reordering and auxiliary verbs, provided the referents were clear and the necessary information available. It may be, however, that as many as half of the children cannot formulate questions themselves while simultaneously interpreting standard English questions in a test situation.

Relative competence in handling questions and narratives

As suggested earlier, narratives may be more productive than answers to questions because children are more competent in constructing narratives than in handling questions. An attempt was made to assess their competence in two ways. The first measure, termed fluency, rated each utterance according to the clarity of all words and the lack of hesitation and repetition of single words and parts of words. The second, termed intelligibility, rated each utterance according to the understanding conveyed to a rater who was not acquainted with the children. It involved, besides understanding key words (and thus some degree of fluency) the occurrence of necessary referents, time sequences, person designations, etc. Each measure was divided into good, fair, and poor ratings. All statements intervening between a question or comment and another question, comment, or key statement, and initial verbalizations were given a single rating, depending upon the degree to which they met these criteria.

Comparison of the average ratings for fluency of answers with fluency of responses to other verbalizations shows that answers have higher ratings. Intelligibility ratings are not significantly different for answers and other responses. As noted above, one reason for the higher fluency ratings of answers may be that they are shorter, and for any individual shorter answers may be more fluent. No definite conclusion can be drawn from this analysis.

Another way of approaching relative competence in handling questions and constructing narratives is to correlate individual ratings on these variables for the 14 children. If competence in responding to questions in standard English is generally low, while competence in constructing narratives varies with individual development, there ought to be little correlation between these measures. As Table 3 shows, this is clearly not the case. All of the correlations between fluency, intelligibility, and length of responses--both answers and responses to other verbalizations--are positive, with one exception; and a number of them are high. (With an N of 14, a correlation coefficient of .532 may be regarded as significantly different from zero at the 5% level and a coefficient of .661 at the 1% level.)

Insert Table 3 about here

The correlations between fluency of answers to questions and the length and intelligibility of responses to other verbalizations are among the highest in the table. That is to say, children who are able to tell longer and more intelligible stories are more likely to speak clearly, not hesitate, repeat, etc., when answering questions. If fluency is a good measure of the ability to process replies--and there is some evidence that this is so--this means that competence in handling questions and in constructing narratives are positively correlated to a rather marked degree.

Incidents of stuttering and fragmented verbalizations occurred when children were disagreeing with the author or attempting to answer why. A reasonable interpretation of these incidents was that fluency dropped when the child was highly motivated to speak but having difficulty in processing his speech. Not desiring to speak is manifested in a different way: by brief responses. Viewed in this way, the lack of correlation between the length of answers to questions and any of the other variables may mean that children do not say so much when answering questions not because they lack the competence to do so, but rather because they do not want to or cannot think of as much to say.

Summary and conclusions

This study of communication patterns in the classroom was carried out in the predominantly Hawaiian community of Aina Pumehana, which is located

Table 3

Intercorrelations Between Fluency and Intelligibility Ratings and Length of Responses to Questions and to Other Verbalizations

Variable number	2	3	4	5	6
1	.46	.38	.26	-.27	.18
2		.69	.43	.48	.61
3			.76	.48	.85
4				.62	.83
5					.66

Definitions:

Variable	1	Length of answers to questions.
	2	Length of responses to other verbalizations.
	3	Fluency of answers to questions.
	4	Fluency of responses to other verbalizations.
	5	Intelligibility of answers to questions.
	6.	Intelligibility of responses to other verbalizations.

in the metropolitan area of Honolulu. Children in the first and second grades are more likely to think of something to say and to say more in recorded conversations with a familiar adult when they are not answering questions. An explanation for this finding might be somewhat as follows. A question constitutes attention directed at the child, which he tends to view as potentially negative. An interested comment, on the other hand, is a cue that the adult is receptive to communications. It resembles an invitation to speak. The response tends to be a personal narrative that is longer and contains more ideas than answers to questions do.

This explanation is advanced on the basis of observations that children are more likely to answer questions that do not "put them on the spot": that is, when they have not been called upon individually in front of a group and when they know the answer, as in talking about their own experiences. They are less likely to answer when the adult is frustrating them or suggests by his behavior that he is checking up on them. They are likely to volunteer information when the adult indicates that he is receptive. The information volunteered ranges from reporting a child who is not obeying to sharing experiences when invited to do so. Children are likely to strike up a conversation when the adult has overlooked misbehavior and acted in a consoling way. The latter behavior stimulates personal and family interests and may even produce phantasies.

Such findings as these may not be restricted to the children of this community. But there are characteristics of the children's social behavior in other circumstances that are consistent with these patterns of communication, and there are cultural patterns in this community that also appear to be directly related.

In many circumstances, children show a strong preference for initiating their own activities and completing them on their own schedule. This lack of dependence upon adults for carrying out activities seems consistent with not asking them questions frequently. Lack of dependence is linked with a sensitivity to adult behavior, however, which is manifested in the way adults are approached for help. A child is reluctant to approach an adult for help until the particular adult has demonstrated his helpfulness; but once he has done so, the child tries to find out how far it will go. In a similar way, he is more inclined to open up verbally to an adult who is consoling and to be encouraged by the adult's interest. Being questioned appears to "put him off" in the same way a refusal to help does.

In American culture we are accustomed to thinking of sensitivity to adults as a trait of dependent children. Related characteristics are combined in a different way by Hawaiian children. A Mainlander can understand the Hawaiian child's perspective better if he thinks of the combination of these traits in a child-centered adult. Such an adult is sensitive to children but should be basically autonomous. He approaches the child in response to cues provided by the child. The Hawaiian child is adult-centered in a similar way--although admittedly not so autonomous. He approaches the adult in response to cues provided by the adult.

This is not to say that children are independent of everyone. Their obvious dependence, however, is upon one another. And here the rules for approach and avoidance, like the patterns of communication, are different than they are with adults. Questions among children are provocative, not inhibiting. The present study has found that children frequently try to outdo one another in communications to an adult, thus saying more than they otherwise would if speaking to the adult alone.

The pattern of conversation among adults in the community is similar to that which the children manifested with the author. To converse is to talk story. One recounts stories and experiences, and others respond in like fashion. To ask questions is bad manners, niele, or nosy. Not to respond with talk of your own is to be seen as unfriendly. Moreover, most persons will wait until they get to know someone before opening up a conversation, rather than starting to talk as soon as introduced. Those who do not behave this way, however, are valued. They are kidded as show-offs. This pattern was pronounced in one of the children. The author never had to invite her to speak, and once she started, he could not get a word in edgewise. There is no stereotype, by contrast, for a person who opens up a conversation with a comparative stranger with a series of polite questions. This is simply the way haoles (Mainland Caucasians) are viewed.

It may be that the right explanation has not been found for the difference in the productivity of questions and narratives. There may be a semantic problem about some types of questions: rhetorical ones, for example. How does one answer a rhetorical question? Certainly most of the difficulty with questions asked in the Oral Production Test appeared to be semantic. Further analysis would be necessary to check this possibility.

One likely explanation for the difference in productivity--a lack of competence in handling questions as compared with narratives--does not seem to be supported by the analysis presented here. Differences among 14 children indicate that fluency in answering questions correlates positively with the length and intelligibility of narratives. If children were much less competent in one than the other this would not be expected.

This finding alone does not warrant much confidence, since little analysis has been done with these ratings. But other evidence points to the same conclusion. Several children in each class produced questions in standard English form. The great majority of children in Class Two were capable of giving appropriate answers to typical questions in standard English, indicating that they understood them.

When there is a need to ask questions, as in the test situation, they do so provided an opportunity is afforded. In an attempt to understand the test stimuli, children asked more questions than usual.

It is apparently true that the forms of questions used most frequently by the children are not typical of adult speakers of standard English. The fact that the children's competence extends to such questions is a common finding in multi-dialect situations. The same is probably true of some phonology and syntax: it spans a wider range of competence than would be indicated by the child's usual performance. Further analysis is being done on this.

What are the implications of these findings for teachers of these children? Two seem to be worth serious consideration. The first is that there is probably no need to translate materials into their dialect, if further evidence supports the conclusions reached here. Their competence, if we are correct, is sufficient to include the essentials of standard English. The problem is not a speech or language problem in the usual sense, but a problem of communication more broadly considered.

What is missing is an attempt to communicate with the children in the ways that are most productive for them. As has been seen, Hawaiian children 6 to 8 years old are stimulated to think and to communicate their thoughts by a friendly and interested adult. While their communications are primarily volunteered narratives of events in their lives, their thoughts in these conversations range beyond familiar events to include questions about the unfamiliar. They are not prepared to answer questions directed at them individually in front of a group, especially questions about unfamiliar material.

How serious is the failure to take advantage of these and the other attidudes and behavior patterns of the children that have been described? At this point the effects on their interests can only be surmised. Unpublished results of a separate study are that disruptive behavior is almost certain to follow attempts by a teacher to interdict involvement of the children with one another. Such attempts may well lead to sterner attempts at control and increasing alienation from the subject matter on the children's part. School may come to mean a place where you are scolded for not doing dull and meaningless work. As older children frequently say when describing their teachers, "She just scold us."

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FOOTNOTES

[1] The present study was stimulated by the work of William Labov in Harlem. See Ref. 8. Valuable guidance was also obtained from Ref. 9. The author is indebted to Ann Peters for calling attention to several important unpublished papers and to Courtney Cazden for allowing him to read a preliminary draft of Ref. 3. Her advice during the preparation of this article was much appreciated.

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[2] See Ref. 2.

[3] See Ref. 2, Table 2.

[4] See Ref. 2.

[5] Data obtained from the Hawaiian Community Research Project files, courtesy of Bernice P. Bishop Museum.

[6] See Ref. 6.

[7] See Ref. 4. Information on the reading scores was obtained from the Language Arts Project in the school. This Project was funded by PL 89-10.

[8] The author is very much indebted to Mr. Kazuo Ikeda, Principal of the school, for permission to conduct the study; and to Mr. Walter Tanaka, Vice-Principal, Miss Carolyn Loper and Mrs. Roberta Tokumaru, Directors of the Language Arts Project at the school, for their assistance in making arrangements with the teachers. For the teachers, who tolerated the observers' presence so graciously, the author feels great admiration and an unbounded gratitude.

[9] Stoughton K. White obtained these data.

[10] See Ref. 5.

[11] The author is indebted to Glen Paul Gordon for advice and assistance in the statistical analysis of these data.

[12] See Ref. 1 and Ref. 7.

[13] See Ref. 10.

[14] The author is indebted to Vi Mays for transcribing and scoring this test. While doing so, she called attention to a number of interesting responses.

PART II

THE EFFECTS OF NONSTANDARD SPEECH IN LEARNING TO READ

Abstract

The purpose of this study was to evaluate the hypothesis that the use of nonstandard speech by children in the first grade interfered with their learning to read. Differential performance when answering questions and volunteering narratives in conversation was also investigated. The study was carried out among 14 children in one class and 26 in another.

Evidence is presented that improvement in reading sentences written by the child correlates, to a degree that almost reaches statistical significance, with an index of the use of standard speech and that the use of nonstandard verbs in conversations correlates negatively with correct identification of pictures used in "reading readiness" exercises. It appears from multiple correlation that the latter relationship is nearly all accounted for by willingness to talk to the investigator while narrating. It is suggested that the effects of nonstandard speech upon learning to identify pictures may be mediated by willingness to talk to an adult who does not use the same style of speech. Attention is called to related findings in a study by Carol Talbert of a black American classroom in a midwestern city.

The present study was undertaken to develop and apply methods for investigating the use of nonstandard speech by children in their naturally occurring patterns of communication in the classroom. Its specific purpose was to relate the findings to individual differences in learning to read in the first grade. The results reported herein are based upon data collected from two first-grade classrooms of a school located in a suburb of Honolulu whose population is predominantly of Hawaiian descent. The data refer to 39 children in these two classes.[1]

At the beginning of the study the hypothesis was advanced that the use of nonstandard speech by the children in the first grade interfered with their learning to read. This hypothesis has been entertained by many in Hawaii and has been widely debated. It has provided one basis for experimental programs, such as the Hilo Language Development Project, in which standard dialect was taught,using the techniques of second-language learning. One basis for such an hypothesis was the observation by Labov (1967)[2] and Beryl Bailey (cited in Bereiter and Englemann, 1966: 45)[3] of many homonyms in the speech of Negro children in the United States. Labov argued that such homonyms could interfere with the child's learning of the phonetic value of the alphabet, unless teachers were prepared to recognize the confusions produced by them and make appropriate corrections.

Such a factor as the effect of homonyms on the phonetic value of the alphabet may have a rather limited effect, however, when compared with the many other functions that the use of nonstandard speech may have. For this reason the present study attempted to assess the extent to which nonstandard speech was used in varying situations. If it were found to be related to individual differences in learning to read, further attention could be given to the nature of the influence of homonyms.

Other aspects of the child's verbal performance were also thought to be important. As Claudia Mitchell, drawing upon the ideas advanced by Hymes and others, states: "The child's effective participation in speech events presupposes the mastery of a much wider proportion of the communicative resources of his speech community than such core features of his language as its phonological and grammatical systems. He must also learn the rules that prescribe the way in which his language is to be used." (Slobin, 1967: 157)[4] Among these uses in the classroom are answering questions and volunteering information. Differential performance in these respects might also influence progress in learning to read, it was thought. Data pertaining to the child's performance were therefore obtained by means of tape-recorded conversations and instructional sessions with the investigator in one class. Measures of individual performance when responding to questions and volunteering narratives in conversation have been analyzed in Part I of the present report. Correlations between these measures and performance in instructional sessions are presented and discussed herein.

Progress in learning to read has been assessed by means of techniques that the teachers themselves used. In Class One this meant asking individuals to identify pictured objects, using spoken words or short phrases, following instruction with the same materials. The tasks used were Reading Readiness exercises by Science Research Associates, Inc. In Class Two individuals were asked to read sentences that they had written one day and two days after they had been able to read them without error to their teacher. In both classes placement in reading ability groups occurred, and these placements form part of the data. Further details are described below in the Results section of the report.

Methods of data collection

Most of the data reported herein were obtained in a class that the investigator visited at approximately bi-weekly intervals from September, 1966, until February, 1968. During this period the class was in the first and second grades. This class is hereafter referred to as Class One. Only one of the approximately 30 students in this class was a Caucasian. Four were Samoan; the rest were of Hawaiian or part-Hawaiian descent. Only the latter are included in the data reported herein. Other data herein were obtained in another first-grade class visited by another observer[5] during the school year 1967-68. This is referred to as Class Two. Three of these 27 students were Caucasian, the remainder Hawaiian. One of the Caucasians has been included in the data reported. Both of the classes were made up of children not selected in any special way.

Data were collected by means of participant observation and tape recordings. During the first year in Class One, the investigator was able to develop several roles. These included a kind of adult friend on the playground and at times in the classroom; a teaching assistant when he was left in charge of the class alone or with the regular teaching assistant; and a teacher when conducting the exercises in Reading Readiness already referred to. Instructions for the latter were in most cases recorded by the teacher, and the children had played the tape recorder to listen to these lessons before the investigator arrived on the scene. They found recording their own voices both interesting and somewhat frightening at times. Opportunities to record and to hear themselves played back were offered by the author during conversations with the children and at play. Over the course of the first year all of the children talked on tape outside of lessons. During the second year they frequently asked to record when the investigator was no longer making

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any effort to get them to do so. Only 14 of the children in Class One have been included in the present analysis. Some said too little each time; others were excluded because they lacked recordings of their performance in the instructional sessions. The sample, while undoubtedly biased, still comprises a wide range of individual variation.

In Class Two the Oral Production Test II, developed by the Dade County, Florida, Board of Education in connection with the Miami Linguistic Readers, was administered. The observer in this class had likewise participated at frequent intervals in class and playground activities and administered the test in the next to last month of school. The test proved to be too complex for these children, and it has accordingly not been scored in the way intended. The test consists of a series of six cartoon pictures which depict a boy and his father going fishing and the family meal that follows. Most of the children found it very interesting. Some asked to take it home and many were stimulated to tell narratives. The situations depicted were understandable on the whole. After going through the pictures and talking about them with the observer, the children were asked a standard series of questions while looking at the same pictures a second time. Their answers, together with anything volunteered during the test situations, were recorded on tape. Afterwards certain forms discussed below were found to have a high frequency of occurrence, e.g., pulled, caught, and that's, because attention was focused upon their referents by the pictures, they were used in the questions asked by the experimenter, or they were sought as answers to the questions. The tapes were scored by noting any occurrence of these forms in the child's speech during the test situation regardless of whether it occurred in specific answer to a question or not--and it rarely did.[6] No inference is made from these data about the child's ability to produce any of these forms.

Rather his tendency to use it within the limits of a more or less common stimulus situtation is taken as an index of his use in similar situations.[7]

Results

The use of standard and nonstandard simple past tense. Other researchers have found that children exposed only to standard English know and use a number of simple past tense forms before the first grade. Berko (1958)[8] reports that kindergarten and first-grade children in Cambridge, Massachusetts, could generalize the regular simple past tense forms generated by final -t and -d. Final -əd could be demonstrated only with familiar verbs, not with novel forms. Ervin (1964)[9] likewise reports evidence for the use of final -t and -d and she also reports the use of several irregular (strong) forms by children under six years of age.

Nonstandard English in Hawaii has several other ways of representing the simple past tense. Tsuzaki (1969) reports the use of went plus verb, as in went eat, as a past tense form in a variety of speech that he has tentatively labeled Hawaiian Creole.[10] We assume that children exposed largely to varieties of nonstandard speech are more likely to show a later development of standard past tense forms than those exposed only to standard English. This assumption is based in part upon DeCamp's observation that each speaker in a multi-dialect situation, such as that in Jamaica and Hawaii, "commands a span (of a) continuous spectrum of speech varieties...."[11] We reason that children faced with this kind of complexity (the rules of which have not even been suggested by linguists so far) may take longer to learn such a form as the simple past tense. According to this line of reasoning, those who use nonstandard forms more frequently should have fewer of the standard forms by a particular age.

All passages of conversation between the investigator and 14 children in Class One were examined for each child's use of past tense.[12] Only those paragraphs were counted where context indicated that the child was talking about a past event. All of the speakers used nonstandard forms such as *went* plus verb, *go* plus verb, *went go* plus verb, *had* plus verb, as well as others. The frequency of use, as a percent of all simple past tense forms, ranged from 29 percent to 80 percent for individual speakers over all passages of their speech. The mean was 52 percent and the standard deviation was 17.8 percent. Inter-individual correlations of this variable with others are reported below. Further analysis of the use of standard forms is being done.

In Class Two the use of standard simple past tense forms in the Oral Production Test situation, described above, has been analyzed. The analysis indicates that individuals vary in a patterned way, as represented in Figure 1. A few children use final *-t* to form the regular past tense and more use final *-d* for this purpose, while none uses final *-əd*. Most use one or more strong (irregular) past tense forms on occasion. The strong form, *kɔt*, seems to be largely limited to those who use final *-t*, plus a few others, half of whom use final *-d*. The distribution of these forms among the children resembles a near-scale of the Guttman type. If valid, it suggests that these children are still learning both regular past tense endings (namely, *-əd* and *-t*) and specific strong forms, such as *kɔt*, while a variety of strong forms are widely used. This pattern is in general accord with our assumption that use of nonstandard forms will slow the acquisition of standard forms. It is also consistent with the findings on the learning of standard forms cited above, except for the fact that they give no indication that final *-t* is learned later than *-d*. If this is indeed a fact it may be based upon phonological differences in Hawaiian nonstandard speech. No attempt has been made to test the assumption that the use of nonstandard forms correlates inversely with the use of standard forms. Such a test in Class One awaits the completion of an analysis of the use of final _-t_ and _-d_ and the use of standard forms. In Class Two such a correlation cannot be calculated until these children's use of nonstandard speech in recorded conversations is analyzed. This cannot be assessed from verbalizations in the Oral Production Test situation because no attempt was made to elicit nonstandard speech in that situation. Moreover, children were heard to correct to standard forms on several occasions when the observer repeated questions.

The use of final -s to form plurals and the contraction of is. The factors that influence the learning of past tense forms apply also to the learning of final _-s_ in such forms as plurals and the contraction of _is_. The use of these forms in the Oral Production Test situation has been analyzed, along with the use of the plural form, _feet_. Other rules for the addition of final _-s_ to form the possessive and the third person singular form of the verb were also investigated. The former did not show any pattern of variation with the other forms analyzed. Tsuzaki (1969)[13] reports the use of the possessive without final _-s_ in the variety of speech that he calls _Pidgin_, e.g., _husband_ _house_. Too few children used the third person singular verb form to make an analysis of it possible.

The distribution of final _-s_ and the plural _feet_ does not form as clear a pattern as the past tense forms of the verb (see Figure 2). Fewer than half of the children use the plural _iz_ or _feet_. The former appears always to be pronounced _-is_. There is no pattern in the use of final -s with feet. On the other hand, more than half of the children use the contraction of is; and all but one form at least some plurals with final -s or -z. Again the rarer form in our data--final -iz--is learned later than -s and -z by speakers of standard English, according to Berko (1958).[14]

For Class Two, separate scores for use of past tense and final -s have been combined into a single score of standard usage.

Productivity in answering questions and narrating. Part I of the report presented evidence that children were more likely to think of ideas, and to talk more in recorded conversations with the investigator, and produce more narratives when they were not asnwering questions but were responding to interested comments or invitations to speak. Other evidence indicated that children were not eager to answer questions fully, rather than unable to do so. Inter-individual correlations between the fluency of answers to the investigator's questions and the length and intelligibility of responses to other verbalizations were significantly high. In other words, children who speak more clearly when answering questions--not hesitating or repeating--were more likely to tell longer and more intelligible stories when not answering questions. The length, fluency, and intelligibility of answers and responses to other verbalizations have been correlated with performance in the Reading Readiness exercises, as reported below.

Measures of progress in learning to read. The measures in Class One were obtained after a period of instruction in which children were drilled in the correct word or short phrase to be used in identifying pictured objects in the Science Research Associates' Reading Readiness materials. When they had corrected their papers they were asked individually to give their answers on tape.[15] One measure was limited to recordings made of the first half of the children recording in a particular group. In these recordings the children had less practice and less opportunity to listen to the answers given by the other children. The second measure was the average of all recordings for each child regardless of the order in which the child recorded in the group. The proportion of correct answers to all requests for identifications comprised each score. From two to five tests were recorded for each of 13 children and the percentages were averaged. No child was forced to record his answers, although those who recorded later frequently did not want to record at the start. That they did so later we believe was due to a dislike of being outdone. Such interaction between the children and the investigator was noted in many circumstances.

In Class Two more private conditions prevailed in the testing. Children were asked to read the sentences that they had written earlier, using a small number of proper nouns and verbs, including the copula, outside the classroom with no other children present. Each child was also asked in the first measure to read his name and date, which had been written on the paper. The score was the percent correct on all of these items, except his name and the copula. A second measure of the same sort was made about a month later, but with some significant differences, which are discussed below. The final measure used in Class Two was a list of nine verbs, presented on a large chart. This measure was obtained between the other two.

Correlations between the use of nonstandard speech and reading progress. As shown in Table 1, there is a moderate negative correlation in Class One between the child's use of nonstandard past tense forms in conversation and the correctness of his verbal identification of pictured objects in the Reading Readiness exercises. The correlation falls short of significance at the .05 probability level. But it holds for both of the testing conditions, i.e., with greater or less exposure to the answers of other children. The measure correlates also with placement in reading ability groups, although not as highly.

Correlations between the use of standard speech and reading progress. The correlations in Table 2 from Class Two are less clear on first inspection. There is a significant correlation (p = .02) between the total score for use of standard speech and the first measure of reading performance described above. Although the component measures of this total score are not correlated with one another, each is correlated with the same measure of reading performance, so we conclude that there is some correlation between use of standard speech and reading performance. But there is no correlation between use of standard speech and ability to read the word list. Nor is there any correlation between the use of standard speech and the second measure in which the children read their own sentences (not shown in Table 2). Why should this be?

Scores on the word list averaged much lower, and for this reason the measure is not as good, despite its correlation with the first measure. Examination of the second measure in which the children read their own sentences indicates that it was too easy for several reasons: children were not asked to read the dates; a number of the children had written sentences that used the same verbs that they had used a month earlier; or they used only one verb. Some, on the other hand, read longer and more complex sentences with fewer errors.

Each child's performance in reading his two sets of sentences a month apart was evaluated and classified as follows: (1) performance initially low, but improved with simpler materials or (2) initially high and/or finally high using more complex materials. The distribution of total scores on the use of standard speech was compared for each of these categories. The t value was 1.88, which with 20 degrees of freedom is not significant at the .05 probability level, using a two-tailed test. It is significant at the same level, using a one-tailed test, however.

Taking all of these findings into account, the investigator is not willing to concede the null hypothesis that no difference in reading progress exists between children who use more nonstandard, or less standard, speech. The existence of two correlations, even though only of borderline significance, obtained by two different observers using different but related measures on two different groups of children, should not be ignored. It would seem a greater risk for future research if the null hypothesis were to be regarded as tenable.

The nature of errors. Some of the errors that children made in oral and written words, particularly in relation to the phonology of the children's speech, should be noted. In Class One children frequently identified the wrong picture in the following pairs when responding to aural stimuli. In each case they knew at least one of the pictures.

reader--*weeder*

parent--*parrot*

mitten--*mittens*

glass--*glasses*

pine--*pie*

three--*tree*

towel--*tower*

shawl--*saw*

Also, in one conversation a lack of contrast was revealed among *wear*, *weigh*, and *wait*. Among the sounds that are often missing from the children's speech in various environments are r, th, final t, -s, and -iz.

Some of the substitutions that children in Class Two made while reading in tests that involve the same sounds are Missis for Miss (overcorrection), Tug Duck for Tug's Hat, a for the, and thinking for wishing. The last one could as likely be due to semantic confusion.

Correlations between verbal productivity and picture recognition in Class One. The two measures of correctness of picture recognition correlate differently and will be discussed separately. As shown in Table 1, when volunteering or agreeing to record during the first half of a testing session, the children who tell longer narratives are the ones who are more likely to give correct identifications. This may be due to their greater willingness to talk to the investigator, greater vocabulary, or both. The correlation between intelligibility of answers to questions during conversations and correctness of picture identifications in the first half of a testing session could be interpreted in similar fashion. It does not account for any additional variance when the first variable has been taken into account, however. The same is true for the use of nonstandard verbs. Both of these latter variables would seem to be measuring the same thing as the first variable, which may be willingness to talk to the investigator or greater vocabulary. Table 1 also indicates that the use of nonstandard verbs correlates negatively with the length of narratives and answers to questions. This is additional evidence that the common feature underlying the correlations may be willingness to talk. It is easy to imagine that a child who speaks nonstandard dialect most of the time might find it more frustrating to talk with an adult who does not.

Scores on word recognition under both conditions of testing (first half and last half combined) appear to be more highly correlated with all of the variables under analysis, except for those already discussed. The only two that approach significance, however, are fluency in narratives and use of nonstandard verbs, which is negative. Again, however, the latter accounts for very little of the variance once the former has been taken into account.

Correlations between placement in reading group and other variables. There is a very high correlation between reading group placement and measures of reading progress, as one might expect. A chi-square test for the relationship between reading improvement described above and reading group placement in Class Two was 6.42, which has less than .025 probability of occurring by chance in a two-by-two table. It is worth noting that four of the 10 children in Class Two who showed improvement over the last month scored at or below the median on use of standard speech, and all four of these were in the top two reading groups. All five students in the low group, on the other hand, showed no improvement despite the fact that two of them had top scores on the use of standard speech.

Assignment to reading groups may be affected to a considerable extent by verbal productivity and use of nonstandard speech. The correlations in Class One shown in Table 1 are consistent with this statement.

Discussion and conclusions

The best evidence that the use of standard speech affects reading progress comes from the finding in Class Two that reading improvement correlates to a nearly significant degree with use of standard speech and from the fact that errors in both classes in written and aural words involve sounds that often are missing in the children's speech. While we suspect on the basis of certain forms that are known by younger children speaking standard English and known by rather few of these children that the use of nonstandard speech may delay the acquisition of these standard forms, this correlation cannot be demonstrated until further phonological analysis is carried out.

The use of nonstandard verbs correlates negatively with correct identification of pictures in the Science Research Reading Readiness exercises. This finding, however, fits into a pattern of correlations which can be interpreted in terms of communication patterns. Giving correct verbal identifications of pictures under one condition correlates with telling longer narratives in conversation and under a wider range of conditions it correlates with the fluency of these narratives. Willingness to talk to the investigator and skill in speaking while narrating appear to account for nearly all of the correlation between the use of nonstandard verbs and correct identification of pictures. Why should this be so? Evidence exists that children who are more likely to use nonstandard verbs are less likely to talk at length to the investigator when narrating or when answering his questions. The effects of nonstandard speech upon learning to identify pictures may be mediated in considerable degree therefore by willingness to talk with the investigator. Unwillingness to talk may limit the feedback of information needed to learn new identifications. It is also important to note that it is willingness to narrate and skill in doing so that correlate with learning picture identifications, not fluency in answering questions.

The findings suggest the possibility of a process which may exaggerate the indirect effects of nonstandard speech upon learning to read. As noted, the use of nonstandard speech appears to limit verbal productivity with adults. Both may result in assignment to a lower reading group.

Further limitation of communication with adults may then result. The author's class observations and personal experience indicate that communication with low reading groups was much less satisfactory. Lower reading groups show less reading improvement and poorer performance on the Reading Readiness exercised. Carol Talbert (1969)[16] has reported a similar sequence in a black American first-grade classroom in a midwestern city, taught by a black teacher. She reports that "peripheral" children (those interacting less often with the teacher) engage primarily in "familiar, emotional" conversation with other children during class and rarely communicate verbally with the teacher. When they do so it is mostly in the same form, which utilizes nonstandard phonology to a greater extent. "Central" children by contrast communicate frequently with the teacher in all forms and receive frequent feedback on the correctness of their speech.

The basic cause of the process described appears to be not nonstandard speech, but the reaction that it sets up. To reverse such a process requires a determined and informed strategy. The efforts of the present investigator to talk as much as possible with children who used nonstandard speech were only partially successful and they obviously did not alter the pattern of correlations described herein.

Figure 1. Distribution of standard simple past tense forms in Class Two.

Scale score	Number manifesting	1.	2.	3.	4.	5.
5	6	+	+	+	+	+
4	1	+	-	+	+	+
	2	-	+	+	+	+
3	2	-	+	-	+	+
	1	+	-	+	+	-
	4	-	-	+	+	+
2	1	-	-	+	+	-
	1	-	-	+	-	+
	1	-	+	-	-	+
	2	-	-	-	+	+
	1	-	+	+	-	-
1	1	-	-	-	-	+
	2	-	-	-	+	-
	1	-	-	+	-	-
Total	26					

Coefficient of Predictability (based upon columns): .63

Definitions:

Variable 1. Regular verb using final /-t/.

2. Irregular form /kɔt/ or some variant.

3. Regular verb using final /-d/.

4. /ejt/, /ijtən/ or some variant.

5. Any other irregular form.

Figure 2. Distribution of final /-s/ and the plural /feet/ in Class Two.

Scale score	Number manifesting	1.	2.	3.	4.
4	3	+	+	+	+
3	4	+	+	-	+
	3	-	+	+	+
	3	+	-	+	+
2	6	-	-	+	+
	1	-	+	-	+
	1	+	-	-	+
1	4	-	-	-	+
0	1	-	-	-	-
Total	26				

Coefficient of Predictability: Inappropriate (scale does not meet criteria).

Definitions:

Variable 1. Plural /-is/ as in /dishis/.

2. Plural /feet/, with or without final /-s/.

3. Contraction of /is/ as in /that's/.

4. Plural /-s/ or /-z/.

Table 1

Intercorrelations Between Verbal Productivity Scores, Use of Nonstandard Past Tense Forms, and Reading Progress in Class One

Variable number	2	3	4	5	6	7	8	9	10
1	.48	.42	.32	-.23	.22	-.41	.10	.24	.30
2		.70	.43	.49	.62	-.41	.50	.39	.34
3			.75	.46	.84	-.35	.22	.35	.14
4				.58	.81	-.14	.30	.49	.24
5					.63	.02	.42	.33	.20
6						-.06	.17	.30	.20
7							-.50	-.46	-.32
8								.87	.72
9									.73

With 13 cases an r of .55 is significant at the .05 probability level.

Definitions:

Variable 1. Length of answers to questions.

2. Length of responses to other verbalizations.

3. Fluency of answers to questions.

4. Fluency of responses to other verbalizations.

5. Intelligibility of answers to questions.

6. Intelligibility of responses to other verbalizations.

7. Use of nonstandard past tense forms in conversation.

8. Correct identification of pictures, first half of children recording in group.

9. Correct identification of pictures recorded at all times.

10. Reading group placement.

Table 2

Intercorrelations Between Use of Standard Speech in the Oral Production Test Situation and Reading Progress in Class Two

Variable number	2	3	4	5	6
1	.04	.61	.30	.09	-.03
2		.82	.34	-.05	.03
3			.45	.01	.01
4				.53	.60
5					.46

With 26 cases of an r .39 is significant at the .05 probability level,
and an r .45 is significant at the .02 probability level.

Definitions:

Variable 1. Use of final /-s/ and the plural /feet/.

2. Use of standard simple past tense.

3. 1 plus 2.

4. First reading of own sentences.

5. Word list.

6. Reading group placement.

Footnotes

1. For further description of the community, including its social class position, see the earlier report by the present author: The meaning of questions and narratives to Hawaiian children, 1969, mss.
2. W. Labov, Some sources of reading problems for Negro speakers of non-standard English. Champaign, Illinois, National Council of Teachers of English, 1967.
3. C. Bereiter and S. Engelmann, Teaching disadvantaged children in the preschool. Englewood Cliffs, N. J.: Prentice-Hall, 1966.
4. D. I. Slobin, ed., A field manual for cross-cultural study of the acquisition of communicative competence. Second draft, University of California, Berkeley, 1967, p. 157.

5. Stoughton K. White was the observer. I am deeply grateful for his scoring of the Oral Production Tests and the reading measures described below.
6. I am indebted to Vi Mays, a native speaker of the speech style and linguistics student, for transcribing and coding all of these data.
7. Two techniques that would greatly have improved the quality of these data, and would have been ideally suited to the situation, are *elicited imitation* (D. I. Slobin and C. A. Welsh, Elicited imitation as a research tool in developmental psycholinguistics, 1967, mss.) and the *cloze* technique. See note 4 for reference.
8. J. Berko, The child's learning of English morphology. Word, 14: 150-177. Also in S. Saporta, ed., Psycholinguistics: A book of readings. New York: Holt, Rinehart, and Winston, 1961, pp. 359-375.

9. S. M. Ervin, Imitation and structural change in children's language. In Eric H. Lenneberg, ed., New directions in the study of language. Cambridge, Massachusetts: MIT Press, 1964, pp. 163-189.

10. S. M. Tsuzaki, Coexistent systems in language variation: The case of Hawaiian English. University of Hawaii, 1969, mss. The terms pidgin, creole, and nonstandard, as used by Tsuzaki and other linguists, refer to varieties of speech which are not standard for the majority of a reference population, such as that of the U.S. For convenience, this paper refers to all such varieties as nonstandard. The term in common use in Hawaii is pidgin.

11. See D. DeCamp, Toward a generative analysis of a post-Creole speech continuum. Paper delivered at the Conference on Pidginization and Creolization of Languages, Mona, Jamaica, 1968. Austin, University of Texas.

12. I am very grateful to Mrs. Kakuko Shoji for coding much of these data, as well as the phonological data still being analyzed.

13. See note 10 for reference to Tsuzaki.

14. See note 8 for reference to Berko.

15. Robert Edmondson very kindly volunteered to score all of these tests.

16. C. Talbert, A sociolinguistic analysis of teacher and pupils. Paper read at the annual meetings of the American Anthropological Association, New Orleans, 1969.